



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of: **KOIKE, et al.**

Serial No.: **09/642,883**

Filed: **August 22, 2000**

Group Art Unit: 2872

Examiner: **Y. Chang**

P.T.O. Confirmation No.: 8966

FOR: **PLANE DIFFRACTION GRATING BASED ON SURFACE NORMAL
ROTATION AND ITS APPLICATION TO AN OPTICAL SYSTEM**

RESPONSE UNDER 37 CFR §1.116
- EXPEDITED RESPONSE -
GROUP ART UNIT 2872

BOX AF

Commissioner for Patents
Washington, D.C. 20231

July 29, 2002

Sir:

In response to the Office Action dated **March 29, 2002**, extended to July 29, 2002 by a

one-month Petition for Extension of Time, please amend the above-identified application as follows:

IN THE CLAIMS:

Please AMEND claims 1 through 15 to read as follows:

1. (Twice Amended) A plane diffraction grating with grooves formed on a surface thereof, the plane diffraction grating being rotated about a rotational axis which is normal to the surface, and being characterized in that a profile of the grooves at a radial area is determined depending on a azimuthal position ϕ of the area about a rotational center defined as a foot of the rotational axis on the surface of the plane diffraction grating.